

TO: Development Services Customers

SUBJECT: INFORMATION BULLETIN 160

**Elevator Sump Pump Provisions** 

DATE: September 17, 2009

Revised June 21, 2013/August 1, 2014

CREATED BY: Plan Review Division

## **Purpose:**

As a customer service initiative, the Development Services Department (DSD) created this **revised** bulletin to update Information Bulletin (IB) 160 on elevator sump pump provisions. This bulletin has been updated to incorporate the department's new format for Information Bulletins.

The purpose of this Information Bulletin is to provide clarification and customer assistance to design professionals when submitting elevator sump pump/floor drain plan review proposals. This Information Bulletin covers elevators installed in commercial settings which may include Limited Usage Limited Access elevators (LULA). Residential elevators (defined as an elevator within a single dwelling unit regardless of travel distance) shall be installed per the manufacturer's instructions.

## Scope:

All elevators for commercial use must comply with Texas Department of Licensing and Regulation (TDLR) requirements - http://www.license.state.tx.us/elevator/ele.htm. All new installations and alterations of elevators after September 1, 2012 require plan review by TDLR. Depending on travel distance (affecting requirements for fire fighter service access) TDLR requires the automatic control of any proposed sump pump or discharge through a floor drain at the minimum discharge rates required by the American Society of Mechanical Engineers (ASME) Standard A17.1 (latest State of Texas adopted version). TDLR does not regulate disposal of any water after the discharge leaves the elevator pit but leaves it up to TCEQ and local municipalities.

In San Antonio, all drain piping for water discharge from the elevator pit must conform to the provisions of the City of San Antonio latest adopted edition of the International Plumbing Code (IPC) and Chapter 10 Amendments. The IPC Section 1003.4 does not allow oily liquid waste from hydraulic elevator pits to be discharged into the sanitary without oil separation, and the San Antonio Water System (SAWS) does not allow discharge of oils into the sanitary system. For a hydraulic elevator or an elevator design that uses hydraulic components with hydraulic fluid, the City of San Antonio will assume the presence of oil in any water in an elevator pit. Therefore a sump pump with some method for separation of oil to prevent discharged into the sanitary will be required for hydraulic elevators. Discharge from the pump shall comply with the rate required by TDLR based on whether the elevator is a firefighter service elevator (travel distance of the elevator greater than 25-feet). A floor drain in the elevator pit connected to the sanitary will not be allowed in San Antonio due to the assumed presence of oils.

For <u>commercial hydraulic elevators or elevators with hydraulic components</u>, to obtain a permit from the City of San Antonio, <u>one of the following requirements</u> shall be incorporated into the proposed construction documents depending on whether the elevator incorporates firefighter service access:

Hydraulic Elevator provided with Firefighter Emergency Operation:

- 1. Letter from the designing engineer stating the sump pump discharge from such equipment will contain no more than 200mg/L of fats, oils or grease per Ordinance 34-472(2)(f), 34-472(2)(o), 34-472(4)(b).
- 2. The fluids from the sump pump shall pass through an approved oil separator and shall comply with provisions outlined per Ordinance 34, Article 5, Division 3.
- 3. The fluids from the elevator pit shall discharge into a separate collection system located outside of the elevator pit. The secondary collection point shall be provided with approved oil detection alarm system. Such system shall not at anytime prevent or stop the pump from the pumping operation that would cause fluids to remain in elevator pit and the secondary collection system sized to handle the volume of water.

Hydraulic Elevator NOT provided with Firefighter Emergency Operation:

- 1. Letter from the designing engineer stating the sump pump discharge from such equipment or discharge from a floor drain will contain no more than 200mg/L of fats, oils or grease per Ordinance 34-472(2)(f), 34-472(2)(o), 34-472(4)(b).
- 2. The fluids from the elevator pit shall discharge into a separate collection system located outside of the elevator pit. A smaller sump pump may be utilized, since the sump pump is not required to be sized per TDLR/ASME discharge rates. In addition the secondary collection system does not require an oil detection alarm. The water collected in a drum is permitted to be manually inspected for presence of oil prior to being disposed of properly.

A proposed oil separation system would still be an acceptable alternative. In no case shall the discharge from a sump pump be permitted to drain to the storm drainage system or to the outdoors, the discharge shall be by connection to the sanitary as required by IPC Section 301.6.

For <u>commercial non-hydraulic (traction) elevators or elevators with no hydraulic components</u> depending on the length of travel of the elevator (serving as a fire service access elevator):

- 1. If the elevator serves as a fire access elevator, either a sump pump or a floor drain must be utilized and the discharge rates must meet TDLR/ASME requirements.
- 2. If the elevator is not a fire service access elevator, no floor drain or sump pump is required by TDLR or by the City of San Antonio.

For an elevator that has no hydraulics, the City will assume there is no oil present in any water discharged from an elevator pit, whether the water is discharged through a sump pump or through a floor drain in the bottom of the pit. There are no requirements for oil separation from the discharged water. Regardless of the design to remove water from the elevator pit a connection to the sanitary is required by IPC Section 301.6.

<u>Residential elevators</u> within a single dwelling unit must be installed per manufactured instructions. There are no TDLR requirements for plan review or requirements for rate of water discharge out of an elevator pit for residential elevators. There is no required City of San Antonio method of disposal of any

accumulation of water in the pit other than a requirement for connection to the sanitary system where a drain or sump pump is proposed. Any elevator that serves more than one dwelling unit, or located outside of a single dwelling unit in residential occupancies as defined by the International Building Code will be considered a commercial use elevator for the purposes of this Information Bulletin.

If you have any questions regarding this Information Bulletin or the procedure for designing elevator pit sump pumps or other methods of removing water from an elevator pit, please call the Plan Review Staff at <a href="mailto:DSDPlansManagement@sanantonio.gov">DSDPlansManagement@sanantonio.gov</a> or by calling (210) 207-4408.

## **Summary:**

This Information Bulletin is for informational purposes only.

**Prepared by:** Andrew Espinoza, Plans Exam Supervisor

**Reviewed by:** Richard Chamberlin, Development Services Engineer

**Authorized by:** Terry Kannawin, Assistant Director